

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V**

DATE: August 12, 1991

SUBJECT: Inconsistencies in the Region V and Region VII QAPP
for the ATSDR Multi-State Lead Exposure Study

FROM: Pat Van Leeuwen, Toxicologist *PM*
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TO: Jodi Traub, Acting Associate Division Director
Office of Superfund

This is a follow-up to my July 24, 1991, memorandum to Glenn Curtis in Region VII (copy attached) regarding the quality assurance project plan (QAPP) for the Agency for Toxic Substances and Disease Registry (ATSDR) Multi-State Lead Exposure Study. Subsequent to that memorandum, changes in the methodologies have been resolved as discussed below that allow for a joint study to go forward.

Region V and Region VII have been working to minimize differences between the methodologies to be used for the collection of environmental samples - soil, house dust, drinking water and paint - for the ATSDR study. These inconsistencies were noted in the draft QAPP recently submitted for approval by Region VII and reflect the restrictions placed on the study by Region VII due to funding and laboratory capability. Region V (Brad Bradley and I) are in the process of preparing a separate QAPP to be used by Region V.

The Region V QAPP will be a modified version of the Region VII QAPP. Due to time delays in Region VII, their environmental samples will be collected in the same time period as the biological samples. This is consistent with the Region V sampling plan. Therefore, we believe that these data bases may be combined to achieve the objectives of the ATSDR study. The Region V QAPP will stipulate that environmental sampling be done at residences of all study participants in the Granite City, Illinois and surrounding area, as opposed to sampling of 25/50 and 100/500 randomly chosen homes in Galena, Kansas and Joplin, Missouri, study areas, respectively. We expect that the Region V data base will be more complete and offer a better set for the ATSDR correlation analyses. As only a small percentage of children are expected to exhibit elevated blood lead levels, the environmental sampling strategy used by Region VII may or may not provide enough data on residences



where elevated blood lead levels are detected. We have no control over Region VII and will not try to defend their sampling strategy should the need arise.

Region VII plans a second round of environmental sampling to cover all homes in which children with elevated blood/urine metal levels were detected. Fred Stalling, ATSDR, has assured us that this data set will be treated separately and not combined with previously described data. Because lead levels are transient in both the environment and in biological systems, this second data set is not appropriate for performing correlation analyses.

Most other inconsistencies in the methodology for sampling and analysis of environmental samples in the two regions have been resolved. The Region VII protocols still lack the level of detail that we would like to see included in the QAPP to insure that the procedures used in both regions are identical. Due to the time remaining to finalize the QAPPs in Regions V and VII, it was decided not to try to address this problem in the QAPPs. Instead sampling teams in both regions will be provided with the specific sampling protocols used for the Cincinnati portion of the Tri-City Lead Study as guidance. We expect that this will insure that the procedures carried out in each region are consistent.

Please contact me at 6-4904 if you have any questions, or would like a briefing on this project.

Attachment

cc. Brad Bradley
Steve Siegal
David Ullrich